

METHOD AND APPARATUS FOR MEASURING ONE-WAY  
DELAY AT ARBIRARARY POINTS IN NETWORK

ABSTRACT

Timestamps are inserted into trace packet expiration messages to identify delay in a  
10 network. A Time To Live (TTL) value in the trace packet is varied to intentionally cause an  
intermediate node in the network to discard the trace packet and send back the packet  
expiration message. The intermediate node sending the packet expiration message inserts a  
time value in the message indicating when the intermediate node received the trace packet.  
The time value is then used to determine the time required for the trace packet to reach the  
15 intermediate node.